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The Alabama Deferred Retirement Option Program

(DROP)

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Background

In 2001, Alabama's Governor, State Finance Director, and Legislative Budget Committee chairs were grappling with the need to cut the education budget by at least 1 percent. Revenues were down, and projected revenues were declining. State leaders fretted that a deeper cut would be needed as the following year's budget shortfall was projected to be $120 million. The Alabama Education Association (AEA) and the State Employees Union and Retirement Systems of Alabama (RSA) suggested the state could save money by adopting a new and progressive type of retirement benefit.[1]

After two years of intense lobbying, the Legislature passed the Deferred Retirement Option Program (DROP), which allowed state and education employees who are 55 years old and have 25 years of service to receive their salary and retirement benefits, while continuing to work. Three years earlier, state and education employees received bonuses and increased retirement incentives, in order to reduce the workforce and cut costs; however, departments such as the Alabama Department of Transportation were left without experienced personnel. Recognizing the problem, state leaders asked the Legislature for a deferred retirement program that would discourage long-term, valuable employees from early retirement.[2]

As of this writing, the latest actuarial valuations of the Teachers' Retirement System of Alabama (TRS) and the Employees' Retirement System of Alabama (ERS) show 5,307 education employees and 2,357 state employees enrolled in the DROP plan (see Table 1).[3]

Table 1
Alabama DROP Participants, by Retirement System: 2006-2009[4]

Year	TRS	ERS
2006	5,375	1,457
2007	5,071	1,518
2008	5,076	2,185
2009	5,307	2,357

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[1] "The RSA estimated last year (2002) initially some 567 state and education employees would opt into the program annually. Since the state pays $269 per month for health insurance for each retired teacher, an analysis done last year [2002] concluded DROP would save the state about $1.8 million annually in insurance costs, according to RSA Deputy Director Marc Reynolds. He estimated the state would save another $266,000 the first year legislators granted a cost-of-living adjustment to retirees—a figure that would grow exponentially over time as additional COLAs are given. "DROP in time really becomes a wash between the insurance and COLAs that you don't pay," Reynolds said. The bill was projected to initially cost about $26 million annually but would be offset by future savings." Source: Susan Salter, "Going for Broke: Money to Dominate Session Again." February 1, 2002, *www.theaasba.org/publications*.

[2] *Ibid*. Dana Beyerle, "Lack of Revenue May Force Legislature to Drop Deferred Retirement Program." *The Tuscaloosa News*, October 14, 2003, p.1, *www.tuscaloosanews.com*.

[3] Retirement Systems of Alabama (RSA), *2009 Annual Report*. Available at http://tinyurl.com/2e6vky6. Access verified May 7, 2010.

[4] *Ibid.*, and earlier reports.

Rep. Charles Newton (D–90th District) argued to House members that he feared the DROP legislation would send a negative message to taxpayers because the state education budget had been cut and some school programs curtailed.[5] Rep. Newton's fears were prophetic, as the failure of the Riley Tax Plan in 2003 (a plan that would have increased funding for the Education Trust Fund) resulted in recommendations by the Governor's Education Spending Commission that the DROP program be terminated. The Governor's efforts, though, were defeated in 2004, when the House Education and Finance and Appropriations Committee voted against his proposal to prevent any more state employees or education workers from enrolling in DROP.[6]

DROP: A Primer

DROP stands for "Deferred Retirement Option Program" (or "Plan" in some states). It was first designed to allow retiring employees who would be difficult or expensive to replace an option to work beyond their retirement age in return for some sort of cash payout, the size of which would depend upon the length of time between retirement and their actual end of employment.[7]

Employees who opt in to a DROP choose to freeze their regular monthly retirement benefit and have it deposited into a separate account with their employer while continuing to work for their state employer.[8] During the DROP period, the employee's DROP account is credited with all or a portion of the monthly retirement benefit, rather than it being paid directly to the member. At the end of the employee's participation in the DROP, a benefit is paid in addition to the employee's existing retirement benefits. This may be in the form of a lump cash sum, periodic payments, an annuity, or a combination of these options. Depending on the DROP, the account may also be credited with interest or cost of living adjustments (COLAs).[9]

Common DROP Features

In general, employees can participate in a DROP only when they are eligible for retirement. Most DROPs require employees who opt in to continue working for a set period of time, usually between three to five years; a few plans, however, allow participation for as little as one month and as long as 10 years or more.[10] When a member chooses a DROP option, he continues to work for the covered employer. Once the DROP period begins, the monthly benefit that the member is eligible to receive goes into an account rather than to the member. At the end of the period, most plans pay the lump sum of the account to the member, but some plans permit a roll-over into an IRA or similar tax-deferred account.[11]

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[5] *Education News Alabama*, August 20-31, 2001, p. 1.

[6] "Committees Kill, Delay Riley's Reform Bills." *Capitol Connection*, February 20, 2004. Available at http://tinyurl.com/29yj4rk. Access verified October 19, 2009.

[7] The first DROPs were modeled after private-sector programs known as "golden handcuffs," where valuable executives, or workers with specialized expertise, are offered increased retirement income benefits without a change in current compensation to continue working.

[8] AIG Retirement, "Alabama Deferred Retirement Option Program: DROP Overview." June 26, 2008. Available at http://tinyurl.com/29uho4s. Access verified July 28, 2010.

[9] "Deferred Retirement Option Program: Initial Consideration." *Ibid*.

[10] Extremely short DROP options are known as "diet DROPs," which allow the employee to pay down personal debts without affecting their pension. Source: *Ibid.,* p. 3.

[11] *Ibid*.

DROP features vary greatly and have a significant impact on both the attractiveness and cost of the plan. Some features tend to increase the cost of the plan to the employer, while others help contain costs.[12] Table 2 below lists some other features often considered in DROPs.

Table 2
Common DROP Features

- Decision to enter DROP is irrevocable
- Employee must leave employment (retire) at the end of the DROP period
- Fixed monthly DROP benefit without calculation at the end of the DROP period
- No additional years of service credit counted during DROP period
- No salary increases during DROP period
- Cost of living adjustments
- Interest-bearing
- Disability and/or death benefits
- No employee contribution required
- Required employer contributions
- Option to purchase an annuity at end of DROP period
- Allow employee to retire before end of DROP period, usually with a penalty
- Delayed receipt of DROP funds

Source: LEOFF Plan 2 Retirement Board, p. 3.

The Alabama DROP

In Alabama, DROP is more of a fringe benefit than a tool to retain critical employees, as most employees who choose to participate in it are not "deferring retirement."[13] To participate, an employee must be age 55 or older (or age 52 or older for state police) and have at least 25 years of credited service with the Retirement Services of Alabama (RSA), the Teachers' Retirement System (TRS), or the State and County Officers and Employees' Retirement System (ERS). Those who choose to participate must do so for no less than 36 months and no more than 60 months. During this period, the participant retains his status as a full-time employee, and his pension, based on average salary and years of service, is deposited into the DROP account while he remains on the payroll and receives a salary. Since Alabama's defined benefit formula is about two percent per year once an employee works at least 25 years, they would already have a pension that is equivalent to 50 percent of their final pay. If an employee who meets these criteria for retirement participates in the DROP (with their pension accruing in an account until their DROP service is completed), this would be the same as the employee receiving a 50 percent increase in total compensation for their years worked in DROP. The employee's pension fund also earns interest (4

[12] "Deferred Retirement Option Program: Initial Consideration."

[13] There are no DROP programs where the employer is certain the plan "defers retirement." In fact, actuaries caution against assumptions that provide overly optimistic estimates of the number of employees who actually have deferred their retirement in order to join DROP. Most do not intend to retire early, yet they sign up for DROP benefits.

percent compounded monthly at the time of this report).[14] This, in effect, provides the employee with a pay increase of about 50 percent during the DROP period.

Unlike some other states, employees in Alabama are not required to end their employment at the end of their DROP period. Rather, their accounts continue to accrue interest until their employment ends. At that point, the state allows them to take either a lump-sum payment (less a required 20 percent federal income tax withholding) or roll over the full amount into a tax-qualified plan, such as an IRA, 401(k), 403(b), or 457(b) of a governmental employer.[15] Any member who withdraws voluntarily before three years of DROP service keeps their own contributions but forfeits any employer contributions and any interest earned on it. Involuntary termination, disability or transfer of a spouse will allow the member to keep the DROP benefit earned to termination date.[16]

DROP's Costs

Early media reports estimated about 567 state employees and teachers were expected to join DROP each year;[17] according to the most recent actuarial valuation (September 30, 2009), there are 5,169 education employees and 2,184 state employees enrolled in Alabama's DROP.[18]

The cost to fund prior-service costs for TRS and ERS is $22 million a year for 10 years (TRS) and 20 years (ERS), with an estimated $5 million per year in normal-service costs (yearly costs). A 2002 monograph by the Society of Actuaries (SOA) cautions that DROP costs are uncertain and only actual plan experience will reveal if adjustments are needed.[19] A conservative estimate (assuming a high number of participants and no changes in retirement rates) would be desirable, until plan experience indicates that costs are lower than anticipated. Paul Hubbert, the head of the AEA, explained DROP's costs as follows:

> *That cost the state $12 million this year, down from $25 million last year, and it will have zero cost next year, because the start-up costs are gone. The program will save the state money in the years after this because if someone retires, the state has to pay the cost of retirement and the benefits and cost of an active replacement. This program offsets the cost of the replacement, because it encourages retirees to keep working.*[20]

However, in an October 21, 2003 letter to State Finance Director Drayton Nabers, RSA Deputy Director Marc Reynolds explained DROP's costs as follows:

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[14] AIG Retirement, "Alabama Deferred Retirement Option Program: Alabama DROP Frequently Asked Questions." June 26, 2008. Available at http://tinyurl.com/2dxalr7. Access verified October 19, 2009.
[15] "Alabama Deferred Retirement Option Program: DROP Overview."
[16] RSA, personal communication, October 19, 2009.
[17] *www.rsa.state.al.us.*
[18] RSA, *2009 Annual Report*: *Actuarial Section*. June 22, 2009, pp. 76, 91. Available at http://tinyurl.com/3xgx6j4. Access verified May 7, 2010.
[19] Robert Bolton and Thomas Lowman, "Design and actuarial aspects of Deferred Retirement Option Programs." Society of Actuaries, March 6, 2003. Available at http://tinyurl.com/36opawc. Access verified May 7, 2010.
[20] Amy Sieckman, "Good Schools Equal Good Jobs." *The Anniston Star*, December 24, 2003, *www.annistonstar.com*.

The full cost of the DROP for FY is 0.5 percent of payroll (per year) for TRS and 0.4 percent of payroll for ERS. This results in a combined cost for both systems of approximately $27 million. Of this amount, approximately $22 million represents the unfunded liability (past service cost) and $5 million the normal cost. The unfunded liability cost will go away or diminish to zero at the end of the funding period, which is approximately eight years for TRS and 18 for ERS, thereafter the cost will be 0.11 percent of payroll or about $5 million in FY05 numbers. (The initial funding period was 10 years for TRS and 20 for ERS in 2001—we are two years into the funding and thus the 8 years for TRS and 18 for ERS).

RSA's estimates are based on long-term plan experience in Alabama, yet determining the cost of a particular DROP plan is difficult, as noted by the SOA monograph:

Figuring out how to determine the cost of a DROP can be difficult. Part of this difficulty can be linked to the limitations of the valuation software. This is particularly true of parameter driven systems as few, if any currently have built-in parameters for DROP plans as they do for cash-balance or career average pay plans.[21]

According to the monograph, if the retirement assumption is that 100 percent of the members retire at their normal retirement dates and that participants cannot elect DROP until that age, and if this were the assumption both before and after the addition of the DROP, then there would be no change in the immediate valuation due to the DROP. Any participant who worked beyond normal retirement date (NRD) would likely generate what some would perceive as an "actuarial gain" (simply because there is no additional pension cost for that year of service), with or without the DROP. If the assumption prior to the addition of the DROP feature were that 100 percent of participants retired at NRD (an assumption the RSA appears to be making in the memo) and, after the DROP, the employee would work past NRD, the immediate impact would be to reduce the employer-contribution rate. This might not be uncommon, if the normal retirement age is 65. However, in the public sector, this age is well below 65, and the plan already assumes that many (if not most) will work beyond it.[22]

As a rule, any increase in time worked beyond the NRD will lower the employer-contribution rate, due to shortening the time in which the annuity is paid and increasing the time in which to fund the benefit. If adding a DROP lengthens the time worked after NRD, the contribution rate of the plan can decrease, even if the DROP ratio exceeds 100 percent. Conversely, the contribution rate goes up if the length of time worked after the NRD goes down.[23]

Considerable thought should be given to the impact on the allocation between the normal cost and actuarial liability (the $5 million and the $22 million, in Alabama's case). For employees at or beyond the NRD when a DROP is added, their immediate retirement probability will decrease. This

[21] "Design and Actuarial Aspects of Deferred Retirement Option Programs." p. 30.
[22] *Ibid*.
[23] *Ibid.*, p. 32.

will often increase normal cost (the yearly cost), since there is no normal cost for the percent assumed to leave immediately. While the actuarial liability will often decrease when retirement rates decline, the impact on current contributions will depend on the funding method and amortization period. If there is a significant portion of active participants past the NRD (as in Alabama's case), the results can be considerably higher.[24]

DROP hamstrings the state in periods of financial distress, because it encourages longer-term, higher-paid employees to continue working, even when the employer might want them to retire in order to replace them with younger employees or just terminate/combine positions. The merit system requires that layoffs be determined by seniority, and those who have entered the DROP program cannot voluntarily terminate without losing their DROP benefits.[25] Generous benefits and investment returns in the RSA often provide a member with retirement income plus social security equal to or greater than that earned while working. Thus, the state continues to employ workers who could retire at equal (or better) pay, while laying off younger and, possibly, better-skilled employees.

The Issue

DROP plans are controversial, for three reasons. First, they are often misunderstood by the public—many of whom are unaware of the need for them—and even state employees, who may not be aware of the potential downsides of DROP participation. Consequently, DROPs have become easy media targets, particularly when it is discovered that high-profile public employees, such as sheriffs, county commissioners, and judges, have received large DROP payoffs, in addition to their pensions. Such "double dipping" has been characterized as gaming the system, second only to "triple dipping"—having a pension plus a DROP payment and then returning to work at the same job for the same salary. A recent example of the use of this epithet can be found in a March 20, 2008 headline in *The Ledger*, a newspaper serving Polk County and Lakeland, Florida, which stated "Wilkinson Incensed by State 'Double-Dippers.'" The subsequent article noted that County Commissioner Randy Wilkinson wanted to abolish the state's DROP program on the grounds that it "allowed senior state employees and elected officials to receive retirement pay while remaining in their positions and drawing their regular salaries," at a cost of more than $300 million per year, allegedly "siphoning funds away from other government programs."[26]

In the same way, some Alabama press reports have referred to the DROP as a retirement "nest egg," a "pension bonus,"[27] and a "perk adopted in lieu of pay raises"—in essence, a way to turn highly-paid, long-term state and education employees into millionaires prior to their retirement.[28] For example, a March 24, 2004 article by the Alabama Farmers Federation (ALFA) entitled, "DROP Windfall Costs State Millions," former AEA executive secretary Paul Hubbert and Joe Reed,

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[24] *Ibid*.
[25] Dana Beyerle, "Potential retirees face Catch-22," *Gadsden Times*, October 12, 2003, *www.gadsdentimes.com*.
[26] Tom Palmer, "Wilkinson Incensed by State 'Double-Dippers,'" *The Ledger* (Polk County, FL), March 20, 2008, p. B1.
[27] Kim Chandler, "Pension bonus battle expected," *The Birmingham News*, October 15, 2003.
[28] *Ibid*.

associate executive secretary, were both on track to have more than $1 million apiece in their DROP accounts by the time they retired.[29]

Second, some DROPs have become the subject of controversy because they have created giant liabilities their providers did not anticipate. According to a 2004 article in *Governing Magazine*, the city of Houston, Texas was spotlighted for offering a guaranteed rate of at least 8.5 percent interest on DROP balances. Not only did this payout rate allow a hypothetical employee earning $40,000 per year and retiring at age 65 to create an annuity worth more than $2.5 million, it threatened to seriously stress the city's retirement system. In 2005, though, Houston's citizens defeated the DROP pension guarantee by a 3-1 margin.[30]

Finally, the recent global economic downturn has placed many DROPs on the chopping block for possible downsizing or elimination. In San Diego, for example, efforts have been made to reduce the guaranteed 8 percent interest rate paid on money deposited in the city's DROP to 4 percent, to keep the city's contributions to its pension plan under control.[31]

Recommendations

Terminating DROP

Several groups, including the Business Council of Alabama and the Governor's Education Task Force, have recommended ending the DROP program, before the program becomes an "entitlement" or "nest egg." The advantages of terminating the program are the cost savings from increased employer payroll contributions to fund the program and the ability to downsize positions that can be combined or eliminated altogether.

The reason for offering the DROP to teachers was to entice them to work beyond their mid-40s. Florida tried to address this problem with a five-year DROP program and found they had to add another three years (for a total of eight years) for teachers to stay. A Florida teacher who starts at age 22 can retire at full pension at age 52. There is no evidence Alabama teachers will work another eight years to draw a DROP benefit when they can work elsewhere for another vested pension. The most cost-effective method of meeting this goal was to raise the retirement age to a minimum of 55 with 30 years of service or 60 with 25 years (the "rule of 85").

The purpose of providing the DROP to state employees was to keep critical, hard-to-replace employees like engineers from retiring. However, not all state employees are critical and hard to replace, and many state and education employees can be replaced at a much lower cost than retaining those currently working. Certain education employees are indeed difficult to replace (higher level math teachers, science, technology, language), and many university science and

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[29] Paul Till, "DROP Windfall Costs State Millions." ALFA *Friends & Family*, March 24, 2004. Available at http://tinyurl.com/26mftrd. Access verified October 19, 2009.

[30] Alan G. Hevesi, *Report on Deferred Retirement Options and Partial Lump Sum Options*, New York State and Local Retirement System, March 2006, p. 18. Available at http://tinyurl.com/2cpu9nb. Access verified October 19, 2009.

[31] David Washburn, "Trying to DROP the Budget Deficit." *Voice of San Diego*, November 19, 2008. Available at http://tinyurl.com/5x4aly. Access verified July 28, 2010.

business school faculty cannot be replaced at even the salary of a current full professor in Alabama. But not all state and education employees are so difficult to replace. The reasons almost all nationwide DROPs are targeted toward police and firefighters are to control costs and to recognize that not every employee has equal skills and is a “key” or “critical” employee.

The state can terminate the program and increase the minimum retirement age to 60 or 62 for state and education employees. Increasing the retirement age would solve the problem of losing employees to early retirement and save the state the cost of healthcare premiums for early retirees (the two reasons given for the DROP program initially). Since state and education employees contribute 5 percent toward their defined benefit funding, they would be paying into the RSA longer, thus alleviating some of the problems created when employees work 25 years but live another 40 years or longer after retirement.

Targeted Restructuring

Targeted restructuring is the most logical solution and would provide value-added benefits to the state by allowing the DROP to be a management tool to retain employees. The restructure would target expensive or hard-to-replace (due to either the marketability of skills or experience in certain areas) employees and shift the onus of the decision from the RSA to the employer. Any employee meeting the age criteria would be eligible to be invited if, in fact, his services were needed. Florida does this with teachers who want to extend their DROP participation period beyond the initial window provided. The employer or a committee, using a strict set of criteria, would determine whether the employee was needed for a deferred retirement. The employee would retire without knowing whether he/she would be invited to join the DROP (thus solving the problem of employees entering DROP to trade the cash bonus for the defined-benefit formula).

With a DROP program, true cost savings can only be attained in one of three ways. First, the employer can design the plan so that the DROP ratios are less than one. For example, the employer may deposit some, but not all, of the pension into the DROP account. (This option is always unpopular with employee unions.)

Alternatively, the employer may require the employee to retire without knowing if he would be allowed to join the DROP. The employer could then determine if the employee needed to be replaced and, if so, whether a less expensive replacement could be hired. If a full professor retires, and the replacement would be almost as expensive or more expensive as retaining him, the DROP could be offered as an incentive for him to continue working past the date he intended to retire. DROP costs are at their lowest when the employee truly intended to retire and would, in fact, have retired, had the DROP not been offered. No employee would be forced to retire—they would be retiring because they wanted to do so. If not asked to join, there is no punitive consequence for them—they simply retire as they wanted to do in the first place. There is no maximum on the years of service on the defined-benefit plan. Any employee who felt he could not afford to retire without the DROP bonus could continue to work and add years on his pension formula.

A third way to reduce the cost of DROP would be to simultaneously raise the retirement age from 60 to 62 and reduce the maximum time in DROP from five years to three years. While the cost of DROP would fall, the cost of employees' pensions would rise, cancelling out the effects of the lowered DROP costs (see Appendix B). However, by increasing the retirement age to 62, many teachers—but not as many administrators—would be deterred from participating, as they would only need 25 years of credited service to draw a pension, move to another state, and resume teaching, receiving a pay raise of at least 50 percent without the three-year time limit that Alabama's DROP would impose.

Alabama could look to Florida's DROP as a guide to setting up these requirements, since Florida already uses this procedure for teachers. An employee who intended to work until age 62, in order to collect Social Security, would work until that age—there would be no "forward DROPing" at age 57 to collect a cash bonus at age 62. At the time of his retirement, if his employer determined that replacing him would be difficult or expensive, he could be invited to join the DROP. Stringent criteria would have to be developed to determine which employees would be invited to join, or else the DROP would likely become a "reward" for certain employees, based on non-objective factors like nepotism, political favors, or friendship.

Alabama should adopt a "Sunset Provision" for the DROP, so that the needs of the state can be assessed and a cost/benefit analysis conducted. Sunset provisions protect taxpayers, by ensuring that DROP programs are affordable and add value to the state. Trustees like such provisions, because they allow plan managers to evaluate the plan for needed changes and lessen the chances that the DROP will become a "pension promise" to employees.

Conclusion

In addition to the recommendations above, there is another choice: do nothing. However, Alabama may not have this luxury. Failure to address DROP's cost problems could lead to a much larger and more expensive problem in the very near future. Alabama legislators must stop the insanity of finding "savings" by adopting programs that increase costs. Policymakers and trustees should be ensured that Alabama can afford the program, as it is currently structured. Policymakers can restructure the program to assure that the legislation meets its original intent and saves the state money. Taxpayers deserve no less.

Appendix A: A DROP Example

The following example assumes that Jane, a school counselor, started work at age 25 and works until age 55. Her life expectancy[32] is age 90, and she is eligible for DROP because she has 30 years of service. She is assumed to have received annual salary increases of 3 percent[33] from age 53 to 59, and her defined benefit formula is 2.0125 percent. The PEEHIP premium cost for her family coverage is $1,281 per month, of which the state would pay $900.[34] The pension-discount rate for the present value of her retirement payments is assumed to be 8 percent—the same as it has been for several years in the RSA's annual *Actuarial Valuations*.[35]

Age	Salary	Assumed Salary Increase
53	$42,417	3%
54	43,689	3
55	45,000	3
56	46,350	3
57	47,741	3
58	49,173	3
59	50,648	3
60	52,167	3

Pension calculation: (.020125) x (years of service) x (average of the three highest salaries in the last 10 years).

Average salary ages 53-55:	$43,702
Average salary ages 58-60:	$50,633
Average salary ages 56-60:	$49,216

Jane is assumed to live until age 90 (the longer the lifespan, the more conservative the estimate). The question is whether she should continue to work, earning years on her defined benefit formula plan, or join the DROP?

Retirement Benefits if Jane Chooses Not to Join the DROP

If Jane chooses to work until age 60 and forego the DROP option, her pension benefits would be based on the defined-benefit formula and her 35 years of service:

Pension = $50,663 (her highest average salary) x (35 years at .020125 per year = 70.438%) = $35,686

[32] A life expectancy of 90 was used as a very conservative estimate because the longer a person in DROP lives, the better DROP looks for the state. For example, if a high-dollar DROP member dies within 20 years after they leave DROP, the state loses a considerable amount of money. It takes a very long time to realize the savings from DROP.

[33] According to the *2005 Alabama Actuarial Valuations*, "Jane" should have received salary increases of 6.32% from age 50 to 54, increases of 5.84% from 55 to 59, and an increase of 5.49% at age 60. As with life expectancy, a very conservative number (3%) was used instead to show the smallest reasonable unfunded liability to the state.

[34] When Jane is working, the total insurance premium for her family would be $886 a month (of which she would pay $134), but when she retires it will increase to $1,281 (of which she would pay $381).

[35] Retirement Systems of Alabama, personal communication, December 10, 2008.

To find the present value of Jane's pension, her annual annuity is multiplied by the present value of an annuity factor[36] at 8 percent for 30 years until age 90:

> 8 percent discount rate: PV pension (age 60) = $35,686 x 11.25778 (current value of an annuity at 8 percent for 30 years) = $401,745.

If Jane Selects Her DROP Option:

Estimated value of the DROP cash payout

If Jane selects the DROP option, her pension will be calculated based on the number of years prior to her entering the program. Once in the DROP, she will continue to work and draw her salary. The RSA will place her pension into her DROP account, where it will earn 4 percent interest. The 5 percent she contributes to her pension is also placed into the DROP account, where it will earn 4 percent interest. The years she is in the DROP will not count towards her defined-benefit pension, but at the end she will receive the yearly pension deposits plus the interest earned on the pension deposits plus her contribution to fund the defined-benefit plan. Not counting her DROP years towards her pension freezes her pension at 30 years of service.

The following is an estimation of Jane's pension, based on 30 years of service, according to the RSA's DROP handbook (see Appendix C for the formula):

Final average salary before DROP: $43,702 x (.020125 x 30 years = 60.375%) = $26,385 annual pension annuity or $2,199 per month.

Pension: $2,199 per month x 66.30 (future value of the monthly annuity at a 4% discount rate)	$145,794
Average five-year salary during DROP period = $49,216 x .2762 (the 5% contribution to fund the defined benefit plan)	$13,608
Total DROP cash benefit	$159,602

When Jane retires, she will receive a check from the State of Alabama for $159,602, if she wishes, or she may receive the cash as an annual annuity, to minimize the tax consequences. She will begin to draw her pension of $26,385 per year, until she dies at age 90.

Present value (value today) of Jane's total pension including the DROP:

8%: $26,385 x present value annuity for 30 years (11.25778): $297,037

Total wealth for Jane, combining her pension and the DROP:

DROP	$159,602
Pension	$297,037
Total	$456,639

[36] PVF-OA n, r = 1- 1/ $(1+r)^n$ / r where n = number of periods and r = the interest rate.

Comparison of Jane's DROP v. not entering DROP and continuing to work option:
The DROP ratio is the present value of her retirement under the DROP plan to the present value if she chooses not to enter the DROP program. One can see that failure to choose the DROP option for Jane would be detrimental. The following illustrates the value to Jane of choosing her DROP at the 8 percent discount rate:

Discount Rate: Age 60	8%
DROP option	$456,639
No DROP	401,745
Total	$54,894
Jane's DROP Ratio	1.137

The RSA initially estimated about 567 employees would enter DROP each year and that about 40 percent of DROP-eligible employees would join. Independent verification of the estimated number of employees who would retire with 25 years of service and be at least 55 years old was not possible; however, one can estimate that

567/40% = 1,417 employees who would be eligible for DROP in any given year.

Approximately 3,785 TRS workers retired in 2008.[37] If 1,417 of these are eligible for the DROP, then about 37 percent of those who retire annually have both 25 years of experience and are at least 55 years old.

The following cost analysis for the DROP program is based on the preceding assumptions from Jane's retirement example and the RSA assumption that only 30 percent of the annual number of retirees each year would be eligible to join DROP. If the percentage of employees who would meet the DROP eligibility requirements is higher than 30 percent, then the costs of having more DROP participants would also be higher. While only actual plan experience will determine how high the DROP participation rate will be for Alabama, there is ample actuarial evidence that higher DROP ratios indicate higher levels of plan participation. Varying the participation rates provides useful information for a best- case/worst-case analysis (see table following). Based on these estimates and a 40 percent participation rate, the net cost to the state would be about $31 million. Since higher DROP ratios are associated with higher participation levels, enrollment rates of 60 percent or more must be considered, when analyzing the DROP plan.

[37] RSA, *2008 Annual Report*, p. 9.

Net Cost to the State for DROP Participants

Estimated Percent of 1,417 Retirees	Retirees Based on Percentage	Net Cost to State: 8% ($54,894)
40%	567	$31,124,898
50	709	38,919,846
60	851	46,714,794
70	992	54,454,848
80	1,134	62,249,796
90	1,275	69,989,850

Assumptions:

1. Number of retirees eligible for the DROP each year: 1,417.
2. Net cost to state for each DROP participant at 8 percent discount rate: $54,894.
3. Net cost numbers from the example for "Jane," a school counselor with a Masters Degree.

At present, there are over 5,300 DROP program participants. If the average net cost to the state for this group is approximately $54,894, then the net cost to the state of these individuals in the DROP is more than $291 million (5,307 x $54,894 = $ 291,322,458).

One complaint about DROP programs is the high cash-flow requirements, especially for plans covering teachers and general employees. The following table illustrates potential cash-flow requirements for a three-, four- and five-year DROP window, varying the participation rates:

Estimated Annual Cash Flow Requirements for DROP Participants:
Total Annual Cash Payouts by Years of Participation

Estimated Percent of 1,417 Retirees	Retirees Based on Percentage	3-Year DROP ($64,298)	4-Year DROP ($87,471)	5-Year DROP ($111,565)
40%	567	$36,456,966	$49,596,057	$63,257,355
50	709	45,587,282	62,016,939	79,099,585
60	851	54,717,598	74,437,821	94,941,815
70	992	63,783,616	86,771,232	110,672,480
80	1,134	72,913,932	99,192,114	126,514,710
90	1,275	81,979,950	111,525,525	142,245,375

Assumptions:

1. Average DROP payout per participant for a three-year program: $64,298.
2. Average DROP payout per participant for a four-year program: $87,471.
3. Average DROP payout per participant for a five-year program: $111,565.
4. The average payout is based on a teacher with a BS degree and an average salary of $36,700. This is an extremely conservative number. Actual amounts are likely to be much higher.

According to the RSA estimates of a 40 percent participation rate and a teacher on a 182-day contract with an estimated salary of $36,700, the potential cash payouts for a four-year DROP are close to $50 million. These are near-future costs; any savings from the reduced defined-benefit formula will be realized many years in the future. If the participation rates increase, as is likely when the plan has higher DROP ratios, the cash payouts increase significantly.

The RSA, AEA, and State Employees' unions posit that the DROP program will save the state money because of the costs of insurance premiums and the savings associated with fewer years accrued on the defined-benefit plan. The following illustrates their cost savings calculations, without regard to the savings in the defined-benefit plan from fewer years of service:

1. If Jane retires and is replaced by an employee making the same salary as Jane did when she retires, the costs are as follows:

Jane's pension	$26,385
Jane's insurance (monthly family premium for a non-Medicare retiree = $566)	6,792
Salary of new employee (Jane's salary upon retirement)	50,663
New employee insurance (monthly family premium, active employee = $458)	5,496
Total cost if Jane retires and is replaced by a new hire	$89,336

2. If Jane participates in the DROP:

Jane's annual salary	$50,663
Jane's insurance	6,792
Jane's pension	26,385
Total cost if Jane retires and is replaced by a new hire	$83,840

From this example, one can see that Jane's joining the DROP would save the state money, assuming that she had truly intended to retire and would have retired had there not been a DROP option (not trading off her defined-benefit plan for her cash payout).

If Jane is replaced by an employee with a comparable degree who needs insurance for their family, but who starts at the bottom of the salary matrix, then the costs would be as follows:

Jane's pension	$26,385
Jane's insurance	6,792
Salary of new employee (first step for a school counselor per the salary matrix)	32,562
New employee insurance (monthly family premium, active employee = $458)	5,496
Total cost if Jane retires and is replaced by a new hire	$71,235

The assumptions that Jane was, in fact, determined to retire and not simply joining DROP for the cash payout and that she would have been replaced by an employee making at or about the same salary are troublesome. Failure to consider the costs and risks associated with DROP programs, especially those for general employees and teachers, can be costly. Trustees should use caution when planning for cash-flow requirements and considering the actuarial assumptions used for the DROP.

Appendix B: Result of Raising the Retirement Age from 60 to 62 and Limiting DROP Participation to Three Years

The following example uses the same data for Jane as in Appendix A, except that her retirement age is 62 instead of 60.

Age	Salary	Assumed Salary Increase
53	$42,417	3%
54	43,689	3
55	45,000	3
56	46,350	3
57	47,741	3
58	49,173	3
59	50,648	3
60	52,167	3
61	53,732	3
62	55,344	3

Pension calculation: (.020125) x (years of service) x (average of the three highest salaries in the last 10 years).

Average salary ages 57-59 [3 yrs before DROP]	$49,187
Average salary ages 60-62 [3 yr highest salary w/o DROP]:	$53,748
Average salary ages 60-62 [avg 3-yr DROP salary]:	$53,748

Retirement Benefits if Jane Chooses Not to Join the DROP

If Jane works until age 62 and foregoes the DROP option, her pension benefits will be based on the defined-benefit formula and her 37 years of service:

Pension = $53,748 (her highest average salary) x (37 years at .020125 per year = 74.4625%) = $40,022

To find the present value of Jane's pension, we multiply the annual annuity by the present value of an annuity factor at 8 percent for 28 years until age 90:

8 percent discount rate: PV pension (age 60) = $40,022 x 11.0510785 (current value of an annuity at 8 percent for 28 years) = $442,285.

If Jane Exercises Her DROP Option:

Estimated value of the DROP cash payout

The following is an estimation of Jane's pension, based on 34 years of service, according to the RSA's DROP handbook (see Appendix C for the formula):

Final average salary before DROP: $49,187 x (.020125 x 34 years = 68.425%) = $33,656 annual pension annuity or $2,805 per month.

Monthly pension: \$2,805 x 38.21 (future value of the monthly annuity at a 4 percent discount rate)	\$107,168
Average three-year salary during DROP period = \$53,748 x .1592 (the 5 percent contribution to fund the defined-benefit plan)	\$8,557
Total DROP cash benefit	\$115,724

When Jane retires, she will receive a check from the State of Alabama for \$115,724, if she wishes, or she may receive the cash as an annual annuity, to minimize the tax consequences. She will begin to draw her pension of \$33,656 per year, until she dies at age 90.

Present value of Jane's total pension including the DROP:

8%: \$33,656 x present value annuity 8 percent for 28 years (11.0510785) = \$371,940

Total wealth for Jane, combining her pension and the DROP:

DROP	\$115,724
Pension	371,940
Total	\$487,664

Comparison of Jane's DROP v. not entering DROP and continuing to work option:
The following illustrates the value to Jane of choosing her DROP at the 8 percent discount rate:

Discount Rate: Age 62	8%
DROP option	\$487,664
No DROP	442,285
Difference	\$45,380
Jane's DROP Ratio	1.103

When compared to the original DROP plan of employees retiring at age 60 after five years of DROP participation (\$456,409), the total cost of raising the retirement age 62 and lowering DROP participation to no more than three years (\$487,664) significantly lowers the cost of DROP (\$115,724) but raises the cost of an employee's pension (\$371,940).

Appendix C: Calculating the DROP Benefit (from the RSA website)

The RSA Retirement Benefits Calculator: Calculating Your DROP Benefit[38]

The following is a step-by-step method of calculating your DROP benefit. This is only an estimate. When you are ready to make a decision about entering DROP, contact the TRS for an official estimate. The retirement benefit calculator on our Web site will also calculate the DROP benefit for eligible members.

1. Determine your monthly retirement benefit at the DROP participation date.

   Average Final Salary x Years and Months of Service x .020125 ÷ 12 = Monthly Retirement Benefit

   The Average Final Salary is the average of the highest three annual salaries in the member's last 10 years of creditable service for which the member made contributions.

   This formula will only compute the Maximum Monthly Retirement Benefit. For Options 1, 2, or 3, use the benefit calculator on our Web site to determine the monthly retirement benefit.

2. Multiply the monthly retirement benefit times the factor associated with the number of years you elect to participate in DROP to give you the DROP contribution's value including interest.

   1 year - 12.24
   2 years - 24.97
   3 years - 38.21
   4 years - 51.98
   5 years - 66.30

3. Determine the value of your contributions, plus interest, made during the DROP participation period. Multiply the average salary (estimated) during the DROP participation period times the factor for the number of years you elect to participate in DROP.

   1 year - .0510
   2 years - .1040
   3 years - .1592
   4 years - .2166
   5 years - .2762

4. Add the two amounts together to give you an estimated value of your DROP benefit at the end of the DROP participation period.

Example: At the DROP participation date the member had an average final salary of $41,000; 31 years of service; and selects the Maximum Retirement Benefit. The member elects a four-year DROP participation period and estimates that the salary for the next four years will average $43,500.

1. Monthly retirement benefit: $41,000 x 31 x .020125 ÷ 12 = $2,131.57

2. DROP contribution value including interest: $2,131.57 x 51.98 = $110,799.00

3. Member contributions including interest: $43,500 x .2166 = $9,422.10

4. Total DROP benefit: $110,799.00 + $9,422.10 = $120,221.10

[38] RSA, "Calculating Your DROP Benefit." Available at http://tinyurl.com/2d4yow4. Access verified May 7, 2010.